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BY FAX

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Copy to
Robins, Dene
Mike

Patricia N.N. Young
American Samoa Program Manager
Office of Pacific Islands and Native American Programs
U.S. Environmental Protection Agency
75 Hawthorne Street (E-4)
San Francisco, California 94105

Dear Pat:

Subject: Joint Cannery Outfall NPDES Studies: Status and Action Items

This letter is an informal status report of the various studies being done by CH2M HILL for StarKist Samoa and VCS Samoa Packing. The purposes of the letter are to: [1] list the studies completed and reports forwarded to USEPA and ASEPA, and [2] list the action items needed from USEPA/ASEPA to finalize plans for the second set of field studies.

Completed Studies (February 1993 Field Data)

We have completed the analysis and reporting for the first field sampling period conducted in February 1993. I believe all of the required reports and documentation have been submitted to USEPA and ASEPA. If any additional material is required, or if you have any questions on the reports, please contact me at your convenience. The only remaining item to be delivered is the video record of the coral reef survey. The tapes are being collated and reproduced and copies will be forwarded by the end of September. The reports submitted to date include the following:

- "Sediment Monitoring Study: February 1993 Data Collection". Technical memorandum prepared for StarKist Samoa and VCS Samoa Packing. CH2M HILL, 29 April 1993.
- "Chemical Analysis of Effluent: February 1993 Sampling". Technical memorandum prepared for StarKist Samoa. CH2M HILL, 29 April 1993.

- "Chemical Analysis of Effluent: February 1993 Sampling". Technical memorandum prepared for VCS Samoa Packing. CH2M HILL, 30 April 1993.
- "Bioassay Testing of Effluent: February 1993 Sampling". Technical Memorandum prepared for StarKist Samoa and VCS Samoa Packing. CH2M HILL, 10 May 1993.
- "Wastewater Treatment System Evaluation for StarKist Samoa, Inc.". Report prepared for StarKist Samoa. CH2M HILL, May 1993
- "Joint Cannery Outfall Dye Study Report: Non-tradewind Season". Report prepared for StarKist Samoa and VCS Samoa Packing. CH2M HILL, July 1993
- "Joint Cannery Outfall Coral Reef Survey Report: February 1993 Survey". Report prepared for StarKist Samoa and VCS Samoa Packing. CH2M HILL, August 1993

Action Items and Questions (October 1993 Field Studies)

We are preparing for the next field data collection period planned for 29 September through 9 October 1993. There are a few unresolved issues that should be addressed. The only critical issue is approval or modification of the Eutrophication Study Plan. Action taken on this plan could effect equipment shipping and staff scheduling in the field. The other items that need to be addressed are not critical to immediate project planning and equipment shipping, but some of them should be resolved prior to project staff travel to Pago Pago. A list of issues is provided below arranged by field activity:

Eutrophication Study. We need approval or comments on modifications of the study plan, in particular the field portion of the study plan, prior to shipping equipment to American Samoa (about 15 Sept 93). Comments on the available data analysis and modeling portions of the study can be addressed after the field work is completed. However, the field portion of the study is planned to be concurrent with the dye study. This will allow a more complete description of physical conditions in the harbor and effluent plume behavior during the field portion of the eutrophication study than would otherwise be possible.

In addition we will need some of the ASG field monitoring data for TN and TP prior to the experiment to determine dosage levels. We can carry out the field experiments without the data but the results may not be as useful for characterizing the response curves used in the subsequent analysis and modeling.

Effluent Chemistry. We propose to eliminate dioxin and asbestos testing from the priority pollutant testing of the effluent. All other constituents will be tested for. We request EPA approval for this modification. There is no identifiable source of dioxin or asbestos in the effluent and the previous test were negative. We note that the second effluent chemistry test is 7 months after the first test, rather than six. This was due to rescheduling the other field work. Although the sampling could have been done earlier we believe it is valuable to maintain consistency in project staff and methodology for the first two tests.

Effluent Bioassays. We propose to use a combined cannery effluent sample as done in the first bioassay test. We also propose to include an immediate dissolved oxygen demand (IDOD) test on the effluent sample as discussed in the report on the first bioassay tests. The bioassay tests will then be run with sufficient aeration to maintain DO sufficient to support the test organism. We request that EPA approve a substitute organism(s) in the event that the juvenile white shrimp specified in the NPDES permit is unavailable. We recommend *Mysidopsis bahia* and/or *Holmesimysis costata*. We will make every reasonable attempt to obtain *Penaeus vannamei* for the test.

As in the case of the chemical testing, the second effluent bioassay test is 7 months after the first test, rather than six because of rescheduling of other field work. As in the case of the chemical testing, the sampling could have been done earlier. However, it was desirable to maintain consistency in project staff and methodology for the first two tests. We note that shipping from American Samoa is difficult and, although we will make every reasonable attempt to meet holding time protocols, some flexibility may be required. We plan to return from American Samoa with the samples carried as excess baggage to minimize shipping time, maintain custody of the samples, and facilitate immediate delivery to the laboratory.

Model Prediction Verification Study. This study plan needs review and approval, but approval is not needed prior to the field work in Pago Pago Harbor in September/October 1993. We will respond to comments and concerns on this study when received. This study is intended to be concur-

rent and associated with the modeling portion of the eutrophication study, and the reviewers should be aware of both study plans.

Sediment Monitoring Study. The revised study plan has been reviewed and approved by EPA.

Dye Study Plan. The revised dye study plan for the tradewind season has been reviewed and approved by EPA.

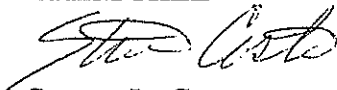
Coral Reef Survey. No revisions are proposed to the original study plan. The next survey is scheduled for February 1995.

I have prepared a summary of issues which we need resolved in the attached table. The date column in the table indicates the time frame need for project planning. Please let me know if any of the issues or dates are unrealistic so we can make some alternative plans. I realize you are busy and appreciate any time you can provide to review these issues. I am available to discuss any of these issues with you or your staff or reviewers as required.

I have sent the same information to Sheila Wiegman at ASEPA. I will call you later this week to discuss the September/October '93 field data collection. If you have any questions please feel free to call me at your convenience.

Sincerely,

CH2M HILL



Steven L. Costa
Project Manager

cc: Norman Wei, StarKist Seafood Company
James Cox, Van Camp Seafood Company
Maurice Callaghan, StarKist Samoa, Inc.
Michael Macready, VCS Samoa Packing Company
David Wilson/CH2M HILL/SEA

Summary of Requested Action Items

Item	Action Requested	Date
Review of Eutrophication Study Plan - Field Portion of Study	Review and Comment; Approve/Disapprove	15 Sept 93
Review of Eutrophication Study Plan - Complete Study	Review and Comment	28 Sept 93
Monitoring Data for TN and TP	Data from ASEPA	28 Sept 93
Effluent Chemistry - eliminate dioxin and asbestos from tests	Approve or Disapprove	28 Sept 93
Bioassay Tests - use of combined effluent and aeration during tests	Approve or Disapprove	28 Sept 93
Bioassay Tests - substitute organisms (only as a contingency)	Approve or Disapprove; or specify alternative	28 Sept 93
Model Verification Study Plan	Review and Comment	1 Nov 93

